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10/645,969	08/22/2003	Charles M. Harvey	QKL-001	8389

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EXAMINER

CHAMBERS, MICHAEL S

ART UNIT PAPER NUMBER

3711

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/645,969

**Applicant(s)**

HARVEY, CHARLES M.

**Examiner**

Mike Chambers

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Lockwood. Lockwood discloses a

head portion comprising a head frame for receiving a mesh thereon (60), at least a distal end of the head frame being flexible; and a rigid, elongated stem portion extending from a proximal end of the head frame, the stem and head frame sharing at least a common continuous exterior material so as to define a unitary structure (fig 1 and 2 ). Regarding the claimed feature of a head and stem, in as much structure set forth by the applicant in the claims, the device of Lockwood is capable of use in the intended manner if so desired (See MPEP 2112).

As to claim 13 : Lockwood discloses an angled distal head (fig 2).

Also,

Claims 1,5 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Brown. Brown discloses a

head portion comprising a head frame for receiving a mesh thereon (13), at least a distal end of the head frame being flexible; and a rigid, elongated stem portion extending from a proximal end of the head frame, the stem and head frame sharing at

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least a common continuous exterior material so as to define a unitary structure (fig 2-1:76-90). Regarding the claimed feature of a head and stem, in as much structure set forth by the applicant in the claims, the device of Brown is capable of use in the intended manner if so desired (See MPEP 2112).

As to claim 5 : Brown discloses a integral continuous portions of a singular mechanical structure (fig 2-1:76-90).

As to claim 13 : Brown discloses an angled distal end (fig 4).

Also,

Claims 1-6,10-11,13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyamamoto et al. Miyamamoto et al discloses a

head portion comprising a head frame for receiving a mesh thereon (fig 3), at least a distal end of the head frame being flexible; and a rigid, elongated stem portion extending from a proximal end of the head frame, the stem and head frame sharing at least a common continuous exterior material so as to define a unitary structure (fig 3-1:52-57,2:61-3:5). Regarding the claimed feature of a head and stem, in as much structure set forth by the applicant in the claims, the device of Miyamamoto is capable of use in the intended manner if so desired (See MPEP 2112).

As to claim 2 : Miyamamoto et al discloses a mechanically joined unitary structure (fig 3,2:61-65). The sheath would be formed by the elastomer once the mold was removed.

As to claim 3 : Miyamamoto et al discloses a polymer (fig 1, 4:64-65)

As to claims 4 and 14 : Miyamamoto et al discloses a composite material (fig 1, 2:24-26).

As to claim 5 : Miyamamoto et al discloses an integrally continuous portions of a mechanical structure (fig 1, 2:61-3:5).

As to claim 6 : Miyamamoto et al discloses an integrally fabricated molding (fig 1, 4:64-65).

As to claim 10 : Miyamamoto et al discloses a composite material (fig 1, 2:24-26).

As to claim 11 : Miyamamoto et al discloses a flexible plastic (2:50-51)

As to claim 13 : Miyamamoto et al discloses an angled head frame (fig 2, 0 degree from center axis )

As to claim 15: Miyamamoto et al discloses glass, boron and carbon materials (2:65-3:5).

Also,

Claims 1-6,8,10-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Feeney. Feeney discloses a

head portion comprising a head frame for receiving a mesh thereon (44), at least a distal end of the head frame being flexible; and a rigid, elongated stem portion extending from a proximal end of the head frame, the stem and head frame sharing at least a common continuous exterior material so as to define a unitary structure (fig 9-5:12-16). Regarding the claimed feature of a head and stem, in as much structure set forth by the applicant in the claims, the device of Feeney is capable of use in the intended manner if so desired (See MPEP 2112).

As to claim 2 : Feeney discloses a mechanically joined unitary structure (fig 9). The sheath would be formed by the polymer once the mold was removed.

As to claim 3 : Feeney discloses a polymer (1:63-65)

As to claims 4 and 14 : Feeney discloses a composite material (4:1).

As to claim 5 : Feeney discloses an integrally continuous portions of a mechanical structure (fig 9).

As to claim 6 : Feeney discloses an integrally fabricated molding (fig 9, 5:12-16).

As to claims 8 and 12 : Feeney discloses a combination of materials (2:10-13). The cross-sectional area of the stem (fig 9) would naturally have a higher rigidity due to the increased cross sectional area compared to the head.

As to claims 10 and 14: Feeney discloses a composite materials (5:12-16).

As to claim 11 : Feeney discloses a flexible plastic (3:63-64).

As to claim 13 : Feeney discloses an angled head frame (fig 2,3).

As to claim 15 : Feeney discloses a composite material (1:26-28).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamamoto et al in further in view of Molitor. Miyamamoto et al fails to clearly disclose a stem with a greater rigidity than the head . Molitor discloses a stem with a greater rigidity than the head ( fig 3, 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to have employed the design of the Molitor device with the material of Miyamamoto et al in order to decrease the weight of the device. The

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cross-sectional area of the stem (fig 4) would naturally have a higher rigidity due to the increased cross sectional area compared to the head.

As to claim 12 : Molitor discloses a head with a greater flexibility than the stem. (The cross sectional area of the head will be more flexible due to the length and cross sectional area than the stem).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feeney. The amount of reinforcing material is a matter of design choice. The specification provides no unexpected results in using a reduced amount of reinforcing material. It would have been obvious to one of ordinary skill in the art to have selected an appropriate amount of reinforcing material in order to manufacture a lightweight and sturdy device to increase the satisfaction of the player.

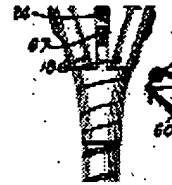
Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feeney in view of Official Notice taken in the prior office action. Feeney discloses using a Teflon® mandrel (4:10). The use of various materials for a mandrel is well known in the art and Teflon is normally applied as a covering on a metal. It would have been obvious to one of ordinary skill in the art at the time of the invention to have used metal to fabricate the mandrel in order to reduce manufacturing costs.

### ***Response to Arguments***

Applicant's arguments filed 11/1/04 have been fully considered but they are not persuasive. Although the applicant has stated that the instant invention is different than

the cited art, the existing claim language when read broadly does not support this conclusion. For example, with reference to Lockwood,

The existing claim language merely calls for a "head portion" and a "rigid elongated stem portion". The throat portion of the Lockwood device can be considered a



head portion with a elongated stem that can be made of any material.

Without additional structure in the claim language, the prior art reads on the instant invention.

With reference to Brown,

The applicant argues that Brown does not disclose a "common continuous external material so as to define a unitary structure". But in the prior paragraph the applicant argues that "the appliance is fashioned from a single piece of wood". In as much structure as claimed by the applicant, this would meet this limitation because the outer edge of the Brown device is a common exterior material that defines a unitary structure. The arguments that the instant invention is more durable or Brown's device is more susceptible to failure are not relevant with regards to the existing claim language.



With reference to Miyamoto,



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The applicant argues that Miyamoto does not disclose a "flexible head and a rigid stem". Merriam-Webster online dictionary provides the following definitions:

Main Entry: **flexible** ❷

Pronunciation: 'flek-s&-b&l

Function: *adjective*

1 : capable of being flexed : **PLIANT**

Main Entry: **rigid** ❷

Pronunciation: 'ri-j&d

Function: *adjective*

Etymology: Middle English *rigide*, from Middle French or Latin; Middle French, from Latin *rigidus*, from *rigēre* to be stiff

1 a : deficient in or devoid of flexibility <*rigid* price controls> <a *rigid* bar of metal> b : appearing stiff and unyielding <his face *rigid* with pain>

2 a : inflexibly set in opinion b : strictly observed <adheres to a *rigid* schedule>

The handle of the Miyamoto device has a greater cross sectional area than the head of the device. Therefore the handle would inherently be more rigid than the head of the device. Again, given the broad nature of the claim language, the instant invention reads on the cited art.

In a similar fashion, the device of Feeney would have a handle and head. The cross sectional area of the handle would impart more rigidity to the handle than the head area since the head area has a smaller cross sectional area i.e the head will flex more than the handle which is all the claim language calls for.

Without clear claim language defining the invention and follow-up in the specification, claims must be read as broadly as possible. The examiner attempted to show this in the prior office action by submitting various devices from different areas to

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obtain claim language that more clearly defined the invention. Apparently this was not successful.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Chambers whose telephone number is (571) 272-4407. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on (571) 272-4415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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January 12, 2005

  
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